

Applc. No. 10/695,365
Amdt. dated July 23, 2007
Reply to Office action of March 22, 2007

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Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (previously presented): An apparatus for controlling a temperature of a printing plate in an external drum exposer having an exposure drum configured as a cylinder for holding the printing plate, the apparatus comprising:

an internal pipe having a longitudinal axis disposed coaxially with an axis of the exposure drum;

at least one rotary lead-through fluidically communicating with said internal pipe for feeding a temperature-controlled liquid directly into and out of said internal pipe such that a flow of the temperature-controlled liquid is confined within said internal pipe; and

webs connected to said internal pipe, said webs configured for connecting said internal pipe to the cylinder for effecting heat transfer from the temperature-controlled liquid to the cylinder via said internal pipe and said webs, thereby achieving a defined temperature of the printing plate.

Applic. No. 10/695,365
Amdt. dated July 23, 2007
Reply to Office action of March 22, 2007

Claim 2 (cancelled).

Claim 3 (previously presented): The apparatus according to claim 1, wherein the cylinder, said internal pipe and said webs are fabricated from a thermally conductive material.

Claim 4 (previously presented): The apparatus according to claim 1, wherein the cylinder, said internal pipe and said webs are fabricated from an extruded part.

Claim 5 (original): The apparatus according to claim 1, wherein said rotary lead-through is disposed at a first end of the exposure drum with which the temperature-controlled liquid is led into said internal pipe; and

further comprising a further rotary lead-through disposed at a second end of the exposure drum with which the temperature-controlled liquid is led out of said internal pipe.

Claim 6 (original): The apparatus according to claim 1, wherein said rotary lead-through is a two-way rotary lead-through disposed at one end of the exposure drum, said two-way rotary lead-through leading the temperature-controlled liquid into and out of said internal pipe.

Applic. No. 10/695,365
Amdt. dated July 23, 2007
Reply to Office action of March 22, 2007

Claim 7 (original): The apparatus according to claim 1,
further comprising a temperature control unit disposed in a
path of the temperature-controlled liquid for keeping the
temperature-controlled liquid at a constant temperature.

Claim 8 (original): The apparatus according to claim 1,
wherein the temperature-controlled liquid is water.

Claim 9 (original): The apparatus according to claim 8,
wherein the temperature-controlled liquid further contains at
least one of a corrosion-prevention additive and an antifreeze
additive.

Claim 10 (original): The apparatus according to claim 3,
wherein said thermally conductive material is aluminum.

Claim 11 (cancelled).

Claim 12 (previously presented): An exposer for controlling a
temperature of a printing plate, comprising:

an exposure head for exposing the printing plate;

Applic. No. 10/695,365
Amdt. dated July 23, 2007
Reply to Office action of March 22, 2007

an exposure drum configured as a cylinder for holding the printing plate and having an axis;

an internal pipe having a longitudinal axis disposed coaxially with said axis of said exposure drum; and

at least one rotary lead-through fluidically communicating with said internal pipe for feeding a temperature-controlled liquid directly into and out of said internal pipe such that a flow of the temperature-controlled liquid is confined within said internal pipe; and

webs connected to said internal pipe, said webs connecting said internal pipe to said cylinder for effecting heat transfer from the temperature-controlled liquid to said cylinder via said internal pipe and said webs, thereby achieving a defined temperature of the printing plate.

Claim 13 (cancelled).

Claim 14 (previously presented): An exposure drum for controlling a temperature of a printing plate, comprising:

a cylindrical body for holding the printing plate and having an axis;

Applic. No. 10/695,365
Amdt. dated July 23, 2007
Reply to Office action of March 22, 2007

an internal pipe having a longitudinal axis disposed coaxially with said axis of said cylindrical body; and

at least one rotary lead-through fluidically communicating with said internal pipe for feeding a temperature-controlled liquid directly into and out of said internal pipe such that a flow of the temperature-controlled liquid is confined within said internal pipe; and

webs connected to said internal pipe, said webs connecting said internal pipe to said cylindrical body for effecting heat transfer from the temperature-controlled liquid to said cylindrical body via said internal pipe and said webs, thereby achieving a defined temperature of the printing plate.

Claim 15 (previously presented): The apparatus according to claim 1, wherein the defined temperature of the printing plate is maintained irrespective of an ambient temperature.

Claim 16 (previously presented): The apparatus according to claim 1, wherein said webs are longitudinal webs running along the axis of the exposure drum over substantially an entire length of the exposure drum.

Applic. No. 10/695,365
Amdt. dated July 23, 2007
Reply to Office action of March 22, 2007

Claim 17 (new): The apparatus according to claim 1, wherein
said internal pipe has an inner surface with longitudinal ribs
therein.